

## CLAIMS

1. A gene panel comprising names and gene expression profiles of genes each showing, in hepatic stellate cells, an increased expression level in an activation state compared with a level in a resting state.

2. A gene panel according to claim 1, wherein the increased expression level of the gene corresponds to a difference of an expression level in a model animal having liver cirrhosis and hepatic fibrosis with an expression level in a normal state in a model animal.

3. A gene panel according to claim 1 or 2, wherein the expression profile comprises a time-varying expression profile in activated hepatic stellate cells.

4. A gene panel according to claim 2 or 3, wherein the model animal is a rat.

5. A gene panel according to any one of claims 1 to 4, further comprising an expression profile of each of at least 5 kinds of genes among 105 kinds of genes represented as Nos. 1 to 105 listed in Tables 1 to 4.

6. A method of producing a gene panel comprising genes each showing, in hepatic stellate cells, an increased expression level in an activation state compared with a level in a resting state, comprising the steps of:

(a) measuring expression levels of various genes in the hepatic stellate cells in the resting state and the expression levels of the genes in the hepatic stellate cells in the activation state;

(b) comparing the expression levels with each other; and

(c) identifying the genes showing the increased expression level in the activation state.

7. A method according to claim 6, wherein the expression levels of the genes in the hepatic stellate cells are analyzed in time course in the step (a).

8. A method according to claim 6 or 7, wherein the expression levels of the gene are analyzed by a gene chip method.

9. A method for screening a drug related to hepatic stellate cell activation, comprising the steps of administering the drug to a model animal or liver tissues or cells, and profiling expressions of genes constituting the gene panel according to claim 1.